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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

**1870-332**

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on 10/14/05Signature Joseph A. YosickTyped or printed  
name**Joseph A. Yosick**

Application Number

**10/671,423**

Filed

**09/24/2003**

First Named Inventor

**George CONNORS**

Art Unit

**1725**

Examiner

**Ing Hour LIN**

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)☒

attorney or agent of record.

Registration number **51,062**☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

Signature

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**October 14, 2005**

Date

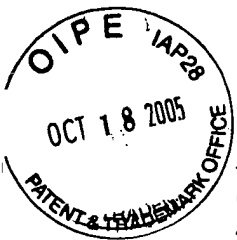
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

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Date of Deposit

Joseph A. Yosick, Reg. 51,062

Name of applicant, assignee or  
Registered Representative

*Joseph A. Yosick*  
Signature

10/14/05

Date of Signature

Our Case No. 1870-332

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Connors et al.

Serial No. 10/671,423

Filing Date: 09/24/2003

For: MOLDING COMPOSITION AND  
METHOD OF USE

Examiner: Lin, Ing Hour

Art Unit No.: 1725

**REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Va. 22313-1450

Dear Examiners:

In response to the outstanding Final Office Action mailed July 14, 2005,  
please consider the accompanying remarks.

**REMARKS**

Applicants request review of the Examiner's rejection of claims 43-49, 52-62, and 65-77 under 35 U.S.C. 103(a) as unpatentable over Greskovich in view of Banerjee et al and further in view of Montoya.

**Montoya is Non-Analogous Art**

Applicants contend that the Examiner erred in considering Montoya to be analogous art to the present application. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Montoya is neither in the field of the Applicant's endeavor nor reasonably pertinent to the particular problem with which the inventors were concerned. Contrary to the statement by the Examiner that Montoya teaches the use of welan gum in a slurry for obtaining a single coat in an investment mold, the invention of Montoya is not directed to an investment mold at all. Montoya is directed to stucco compositions that are applied to various external surfaces. (col. 1, lines 15-17). For example, Montoya describes delivering the stucco mix by truck to a job site and then applying it to walls. (col. 9, line 66 to col. 10, line 42; col. 11, lines 10-11). Montoya does not mention any sort of casting or molding process. Thus, Montoya is neither in the field of investment casting, nor is it reasonably pertinent to creating investment casting shells more quickly, efficiently, cheaply, or of higher quality. Therefore, Montoya is not analogous art.

The case of *In re Clay*, 966 F.2d 656 (Fed. Cir. 1992) is illustrative. Clay's invention was a process for storing a liquid hydrocarbon product in a storage tank having a dead volume by using a gelation solution which gels after it is placed in the tank's dead volume. Two prior art references were applied against the claims on appeal. Hetherington disclosed an apparatus for displacing dead space liquid using impervious bladders. Sydansk disclosed a process for reducing the

permeability of hydrocarbon-bearing formations using a gel similar to that in Clay's invention.

The Court held that Sydansk could not be considered to be within Clay's field of endeavor merely because both relate to the petroleum industry. The Court noted that Sydansk taught the use of a gel in unconfined and irregular volumes within generally underground natural oil-bearing formations to channel flow in a desired direction; Clay taught the introduction of gel to the confined dead volume of a man-made storage tank. Additionally, the two processes operated in very different conditions: Sydansk at high temperatures and pressures, Clay at ambient conditions. Clay's field of endeavor was the storage of refined liquid hydrocarbons. The field of endeavor of Sydansk's invention, on the other hand, was the extraction of crude petroleum. The court held that these two fields were clearly different.

The Court also held that Sydansk was also not reasonably pertinent to the problem Clay was attempting to solve. The invention of Sydansk functioned to fill anomalies so as to improve flow profiles through a formation, while the invention of Clay functioned to displace liquid product from the dead volume of a storage tank. Sydansk's problem of recovering oil from rock was not reasonably pertinent to Clay's problem of preventing loss of stored product to tank dead volume. Moreover, the subterranean formation of Sydansk was not structurally similar to, did not operate under the same temperature and pressure as, and did not function like Clay's storage tanks.

Similarly, in this case, the applicants' present invention and Montoya are directed to different fields of endeavor. The present invention is related to the investment casting of objects like statuettes and Montoya is directed to stucco compositions that are applied to various external surfaces. The two fields use different materials, are used in different areas, and are directed to different objectives. The fields of endeavor in the present invention and in Montoya are even farther apart than the storage of refined liquid hydrocarbons and the extraction of crude petroleum discussed in *In re Clay*.

Additionally, Montoya is not reasonably pertinent to the problem the Applicants were attempting to solve. The Applicants were attempting to provide a method of making an investment casting mold more quickly, efficiently, cheaply, or of higher quality. The invention of Montoya involves a ready-to-use stucco formulation containing hydraulic cement and plaster sand that is applied to an exterior building surface and does not have to be mixed on-site. The welan gum in Montoya acts to bind up free water in the retarded stucco composition so that the composition does not dry out from water evaporation during the pre-application period. (col. 6, lines 55-58). The present invention uses a colloidal silica, alumina, and silicon carbide mixture that is applied to a substrate to make an investment casting shell. In the Applicants' invention, the welan gum is believed to help provide a uniform and stable distribution of the components of the mixture while producing a shell. (§ 25). There is no indication that a material used to bind up free water in a stucco composition could be used with a colloidal silica material to help make an investment casting mold more quickly, efficiently, cheaply, or of higher quality.

Additionally, the Applicants' invention and Montoya operate under very different conditions. The stucco coating of Montoya is exposed to external ambient conditions, while the investment casting shell of the invention is fired at high temperatures to remove the substrate, and then filled with a liquid metal at high temperatures. (§ 16). Thus, the materials of the present invention are subjected to very different conditions than the stucco coating of Montoya.

#### **No Motivation to Combine Montoya with Greskovich**

Applicants also contend that the Examiner erred in concluding there was a motivation to combine Montoya with Greskovich. Obviousness requires some suggestion or motivation to combine the references. Even if Montoya were to be considered analogous art, there is no suggestion or motivation to combine Montoya with Greskovich. (see Amendment A, pages 9-10). Greskovich is directed to a method for making investment casting molds for casting of superalloys. As previously described, the invention of Montoya is not directed to

an investment mold at all. Montoya is directed to stucco compositions that are applied to various external surfaces, such as walls. Montoya does not mention any sort of casting or molding process. Additionally, the materials used in Greskovich and Montoya are completely different. Montoya teaches a stucco containing hydraulic cement and plaster sand. Greskovich teaches a slurry containing alumina and colloidal silica. There would be no motivation to add a material used with hydraulic cement and plaster sand, to a material using alumina and colloidal silica. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). Because Greskovich and Montoya teach completely different methods and completely different materials, there would be no motivation to combine the two. Because one skilled in the art would not be motivated to combine Montoya with Greskovich, claims 43-49, 52-62, and 65-77 are not obvious. Applicants respectfully request review of these rejections.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Joseph A. Yosick", is written over a horizontal line.

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